Quick Fact Sheet

Agilent 81110A Pulse Pattern Generator

1. Display
2. Memory card
3. Channel 2 differential output
4. Channel 1 differential output
5. Trigger out
6. Strobe out
7. Trigger In
8. Keypad

The Agilent 81110A pulse pattern generator is the industry-standard for pulse, pattern, data and PRBS generation up to 165/330 MHz.

It provides high quality signals and leading flexibility that meets virtually all application needs. This instrument is a must for all labs.

Other highlights are:

- The Agilent 81111A 165 MHz 10 V module with variable transitions.
- The Agilent 81112A 330 MHz 3.8 V module has differential outputs and two selectable transition times.
- Integrated in one instrument, which increases signal performance, minimizes cabling, space and test time.
- Glitch free change of timing parameters (delay, frequency, transition time, width, delay cycle).
- Programming language compatible with Agilent 81101A, 81104A and 81150A.

Choose your hardware

Code	Description
81110A	165/330 MHz mainframe
#DOC	Printed documentation, variouslocalizations
#1CP	Rackmount kit with handle
#OBW	Service docummentation
#UFJ	1 MB SRAM memory card
#UK6	Cal. certificate with test data
#NOC	Mainframe only
#UN2	Rear panel connectors
81111A	165 MHz interface, 1 channel
81112A	330 MHz interface, 1 channel

Key specifications	Description
81110A	Mainframe for 81111A and 81112A interfaces
Waveforms	Pulse, pattern with PRBS, NRZ, RZ, DNRZ
Channels	1 or 2, differential outputs, BNC (Single ended for 81111A)
Output amplifier	
81111A	165 MHz, 100 mV to 10 V
81112A	330 MHz, 100 mV to 3.8 V
Transition time (10/90)	
81111A	2.5 ns to 100 ms, variable
81112A	800 ps or 1.6 ns
Output impedance	50 Ω/1 kΩ selectable
Pattern memory	16 kBit/channel
Programming interfaces	LAN, SCPI 1992, IEEE 488.2 (GPIB)
Supported drivers	Agilent VEE, NI Labview

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Pulse pattern generator selection guide

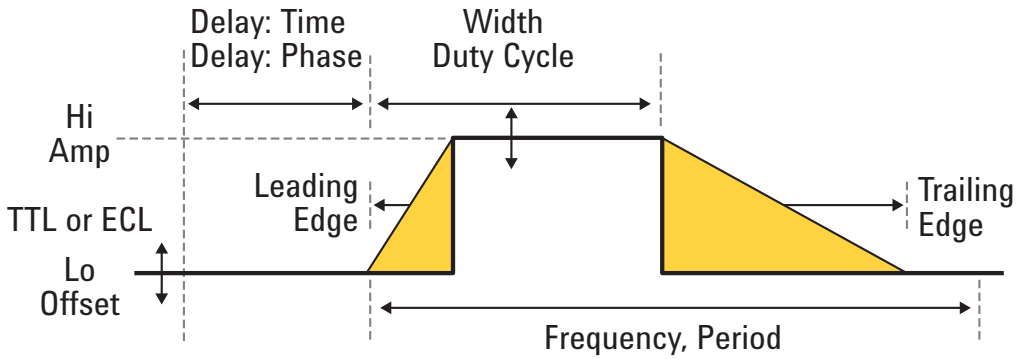
Model	Bandwidth	Channels	Voltage
81101A	50 MHz	1-ch	100 mV to 10 V
81104A + 81105A	80 MHz	1 or 2 ch	100 mV to 10 V
81150A	120 MHz	1 or 2 ch	50 mV to 10 V
81130A + 81131A	400 MHz	1 or 2 ch	100 mV to 3.8 V
81130A + 81132A	660 MHz	1 or 2 ch	100 mV to 2.5 V

Complementary products

Model	Description
DSO/MSO 6000, 7000	InfiniiVision 7000 Series Oscilloscopes up to 1 GHz bandwidth
DSO/MSO 8604A	Infiniium DSO/MSO Oscilloscope with 800 MHz bandwidth
DSO/MSO 5000	InfiniiVision 5000 Series Oscilloscopes up to 500 MHz bandwidth
DSO 3000	Economy DSO 3000 Series up to 200 MHz bandwidth

Characteristics on a pulse pattern shape

All parameters can be selected and edited with the Agilent Pulse Pattern Generators



Typical applications

- Distorted signals for stress tests (Application Note 5989-4709EN)
- Sensor simulation
- Clock signal generation (Application Note 5968-5844E)
- Radar distance testing (Application Note 5968-5843E)
- Disc drive tests (Application Note 5968-5845E)
- Diodes - LEDs
- PRBS generation
- Pulsed IV measurements
- System trigger source
- Capture and reproduce live signals

Related literature

Pub Number	Name
5980-1215E	Agilent 81100 Family of Pulse/Pattern Generators
5980-0489E	Pulse Pattern and Data Generators For Digital and Analog Testing

Recommended service options

Additional two years of Return-to-Agilent warranty
Additional two years of Return-to-Agilent calibrations
For more information go to **www.agilent.com/find/removealldoubt**

www.agilent.com/find/81110

Technical data, availability and pricing subject to change without notice.
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